

WHAT IS CLAIMED IS:

1. A measuring apparatus cooperating with a service device for providing position information to a request apparatus requesting a position of a search  
5 object, comprising:

a unit accepting from the request apparatus a search request for searching the position of the search object;

a unit calculating a distance between the  
10 measuring apparatus and the search object;

a unit acquiring present position information of the measuring apparatus; and

a unit transmitting the present position information and the distance information to the  
15 service device.

2. A measuring apparatus according to Claim 1, further comprising:

a unit transmitting radio waves receivable by the search object; and

20 a unit receiving a response to the radio waves from the search object.

3. A measuring apparatus according to Claim 1, wherein the search request contains information capable of specifying the request apparatus, and

25 the unit transmitting the present position information and the distance information together with the specifiable information to the service

device.

4. A service device for providing position information to a request apparatus requesting the position information of a search object, comprising:

5 a unit receiving, from a measuring apparatus for measuring a position of the search object, present position information of the measuring apparatus and information about a distance between the measuring apparatus making the measurement and  
10 the search object; and

a unit transmitting to the request apparatus the position information of the search object that has been calculated based on the present position information and the information about the distance to  
15 the search object.

5. A request apparatus provided with position information of a search object through a system including a service device for providing the position information of the search object and measuring  
20 apparatuses for reporting distances to the search object to the service device, comprising:

a unit transmitting a search request for the position information of the search object to the measuring apparatuses existing in the periphery of  
25 the self-apparatus; and

a unit receiving via the service device the position information of the search object that is

based on the reports given from the measuring  
apparatuses.

6. A request apparatus according to Claim 5,  
wherein the search request contains information  
5 capable of specifying the individual request  
apparatus and information for designating the search  
object, and

the receiving unit receives the position  
information in accordance with the specifiable  
10 information.

7. A request apparatus according to Claim 5,  
further comprising unit receiving setting of a search  
object range in the periphery of the self-apparatus,  
wherein the transmitting unit includes  
15 transmission gain control unit controlling  
electromagnetic waves carrying the search request at  
a predetermined receipt electric power level in the  
search object range.

8. A method executed by a apparatus  
20 cooperating with a service device for providing  
position information to a request apparatus  
requesting a position of a search object, comprising:  
accepting from the request apparatus a search  
request for searching the position of the search  
25 object;

transmitting radio waves receivable by the  
search object;

receiving a response to the radio waves from  
the search object;

calculating a distance between the apparatus  
and the search object from the response received;

5        acquiring present position information of the  
apparatus; and

transmitting the present position information  
and the distance information to the service device.

9.    A position information measuring method  
10    according to Claim 8, wherein the search request  
contains information capable of specifying the  
request apparatus, and

transmitting the present position information  
and the distance information together with the  
15    specifiable information to the service device.

10.   A method executed by a service device for  
providing position information to a request apparatus  
requesting the position information of a search  
object, comprising:

20        receiving, from a measuring apparatus for  
measuring a position of the search object, present  
position information of the measuring apparatus and  
information about a distance between the measuring  
apparatus making the measurement and the search  
25    object; and

transmitting to the request apparatus the  
position information of the search object that has

been calculated based on the present position information and the information about the distance to the search object.

11. A method executed by a apparatus provided  
5 with position information of a search object through a system including a service device for providing the position information of the search object and measuring apparatuses for reporting distances to the search object to the service device, comprising:

10 transmitting a search request for the position information of the search object to the measuring apparatuses existing in the periphery of the self-apparatus; and

receiving via the service device the position  
15 information of the search object that is based on the reports given from the measuring apparatuses.

12. A position information requesting method according to Claim 11, wherein the search request contains information capable of specifying the  
20 individual request apparatus and information for designating the search object, and

receiving the position information in accordance with the specifiable information.

13. A position information requesting method  
25 according to Claim 11, further comprising receiving setting of a search object range in the periphery of the self-apparatus,

controlling electromagnetic waves carrying the search request at a predetermined receipt electric power level in the search object range.

14. A storage medium that stored an  
5 executable-by-computer position information measuring program for making a apparatus cooperating with a service device for providing position information to a request apparatus requesting a position of a search object, the program execute:

10 accepting from the request apparatus a search request for searching the position of the search object;

transmitting radio waves receivable by the search object;

15 receiving a response to the radio waves from the search object;

calculating a distance between the apparatus and the search object from the response received;

acquiring present position information of the  
20 apparatus; and

transmitting the present position information and the distance information to the service device.

15. A storage medium that stored a position information measuring program according to Claim 13,  
25 wherein the search request contains information capable of specifying the request apparatus, and  
transmitting the present position information

and the distance information together with the  
specifiable information to the service device.

16. A storage medium that stored a program for  
making a computer for providing position information  
5 to a request apparatus requesting the position  
information of a search object, the program execute:

receiving, from a measuring apparatus for  
measuring a position of the search object, present  
position information of the measuring apparatus and  
10 information about a distance between the measuring  
apparatus making the measurement and the search  
object; and

transmitting to the request apparatus the  
position information of the search object that has  
15 been calculated based on the present position  
information and the information about the distance to  
the search object.

17. A storage medium that stored an  
executable-by-computer position information  
20 requesting program for making an apparatus provided  
with position information of a search object through  
a system including a service device for providing the  
position information of the search object and  
measuring apparatuses for reporting distances to the  
25 search object to the service device, the program  
execute:

transmitting a search request for the position

information of the search object to the measuring  
apparatuses existing in the periphery of the self-  
apparatus; and

receiving via the service device the position  
5 information of the search object that is based on the  
reports given from the measuring apparatuses.

18. A storage medium that stored a position  
information requesting program according to Claim 17,  
wherein the search request contains information  
10 capable of specifying the individual request  
apparatus and information for designating the search  
object, and

receiving the position information in  
accordance with the specifiable information.

15 19. A storage medium that stored a position  
information requesting program according to Claim 17,  
wherein the apparatus is made to further execute  
receiving setting of a search object range in the  
periphery of the self-apparatus,

20 transmitting a transmission gain control  
controlling electromagnetic waves carrying the search  
request at a predetermined receipt electric power  
level in the search object range.